

UNITED STATE EPARTMENT OF COMMERCE Patent and Trademark Offic

Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231

APPLICATION NO. **FILING DATE** FIRST NAMED INVENTOR ATTORNEY DOCKET NO. KANG 09/458,506 12/09/99 T 5484-53 **EXAMINER** MM91/0328 MARGER JOHNSON & MCCOLLOM PC PAPER NUMBER **ART UNIT** 1030 SW MORRISON STREET PORTLAND OR 97205 2811 **DATE MAILED:**

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

03/28/01

Application No. 09/458,506

ORI NADAV

Applicant(s)

Kang

Office Action Summary

Examiner

Group Art Unit 2811

X Responsive to communication(s) filed on Feb 23, 2001	
☐ This action is FINAL .	
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to e is longer, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extension 37 CFR 1.136(a).	respond within the period for response will cause the
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s) 1-13	is/are withdrawn from consideration.
☐ Claim(s)	
	is/are rejected.
☐ Claim(s)	
Claims are subject to restriction or election requirement.	
Application Papers	
☑ See the attached Notice of Draftsperson's Patent Drawing I	
X The drawing(s) filed on <u>Dec 9, 1999</u> is/are objected	
☐ The proposed drawing correction, filed on	is 🗀pproved 🗀disapproved.
X The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).	
☑ received.	ner)
☐ received in Application No. (Series Code/Serial Number) ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received:	
Attachment(s)	·
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s)
☐ Interview Summary, PTO-413	
■ Notice of Draftsperson's Patent Drawing Review, PTO-948 ■ PTO 450 ■	
□ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

Art Unit: 2811

DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of claims 14-28 in Paper No. 4 is acknowledged.

Drawings

2. The drawings are objected to because in the section "Brief Description of Drawings" figures 6-9, and 13-16 are not mentioned individually. Correction is required.

Specification

3. The abstract of the disclosure is objected to because it describes a method of making a device, whereas the claimed are directed to a semiconductor device.

Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2811

5.

substrate, as recited in claims 14, 18, 22 and 26, is unclear as to how active regions of

The claimed limitation of active regions of transistors having electrodes on the

transistors can have electrodes on the substrate, since active regions of transistors are

formed between the source and drain regions inside the substrate.

6. The claimed limitation of two or more gate at a substantially constant gap on the

substrate, as recited in claims 14, 18 and 22 is unclear as to which gap applicant

refers, and how the gap is structurally connected to the gates.

7. The claimed limitation of dummy gates at substantially the same gap, as recited

in claims 14, 18 and 22 is unclear as to which gap applicant refers, and how the gap is

structurally connected to the gates.

8. Claims 18 and 22 recite the limitation "the transistors gates" in lines 6. There is

insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

Art Unit: 2811

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent

before the invention thereof by the applicant for patent.

10. Claims 14-16, 18-20, 22-24 and 26-27, insofar as in compliance with 35 U.S.C.

112, are rejected under 35 U.S.C. 102(e) as being anticipated by Oyamatsu

(5,923,969).

Oyamatsu teaches in figure 14 a substrate 1 (figure 13), active regions of a plurality of

transistors having at least one first and second electrodes on the substrate, a plurality

of transistor gates on the substrate between said electrodes, wherein two or more

gates are of a predetermined width and length at a substantially constant gap on the

substrate, and a plurality of dummy gates having a predetermined width and length

between a plurality of transistors at substantially the same said gap.

Regarding claims 15, 19, 23 and 26, Oyamatsu teaches in figure 14B the length of

dummy gates being substantially the same as that of the transistor gates.

Regarding claims 16, 20 and 24, Oyamatsu teaches in figure 14 transistor gates having

common terminals each of which connected on the substrate.

Application/Control Number: 09/458,506

Art Unit: 2811

Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 14-16, 18-20, 22-24, 26-27 and 17, 21, 25, 28, insofar as in compliance with 35 U.S.C. 112 rejected under 35 U.S.C. 103(a) as being unpatentable over Oyamatsu in view of Bothra et al. (6,020,616) or Japanese Patent (9-289251). Oyamatsu teaches substantially the entire claimed structure, as applied to claims 14, 18, 22 and 26, except dummy gates being commonly connected.

Bothra et al. teach in figure 3L a plurality of dummy gates 226 being commonly connected on a substrate. Japanese Patent teaches in figure 3 a plurality of dummy gates 1 being commonly connected on a substrate.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to commonly connect the plurality of dummy gates in Oyamatsu's device in order to simplify the processing steps of making the device.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References C and O are cited as being related to layouts of dummy gates.

Page 5

Art Unit: 2811

Papers related to this application may be submitted to Technology center (TC) 2800 by facsimile transmission. Papers should be faxed to TC 2800 via the TC 2800 Fax center located in Crystal Plaza 4, room 4-C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 2811 Fax Center number is (703) 308-7722 and 308-7724. The Group 2811 Fax Center is to be used only for papers related to Group 2811 applications.

Any inquiry concerning this communication or any earlier communication from the Examiner should be directed to *Examiner Nadav* whose telephone number is **(703) 308-8138**. The Examiner is in the Office generally between the hours of 7 AM to 3 PM (Eastern Standard Time) Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas, can be reached at **(703)** 308-2772.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center Receptionists** whose telephone number is **308-0956**

Ori Nadav, Ph.D.

March 16, 2001

William Mintel
Primary Examiner
Art Unit 2811

William Mintel